



Eastern Kern

Air Pollution Control District

Glen E. Stephens, P.E.
Air Pollution Control Officer

May 2, 2018

Ms. Carol Sutkus
Air Resources Board
Stationary Source Division
P.O. Box 2815
Sacramento, CA 95815

SUBJECT: Amended Rule 425.3, Portland Cement Kilns (Oxides of Nitrogen)

Dear Ms. Sutkus:

Enclosed is the Rule Action Package for 425.3, Portland Cement Kilns (Oxides of Nitrogen), amended by the Eastern Kern Air Pollution Control District (District) Board of Directors on March 8, 2018. Amended Rule 425.3 became effective upon Board Adoption. The package is being sent electronically to csutkus@arb.ca.gov. The District requests that the California Air Resources Board (CARB) forward all appropriate documentation to U.S. EPA Region IX office as a revision to the District's SIP.

The District also requests that CARB update their District Rule database of Rules and Regulations located on the CARB website at <http://www.arb.ca.gov/drdb/ker/cur.htm> to include Amended Rule 425.3 once it has been approved by EPA.

Included in the Rule Action Package are the following attachments:

- 1) Complete Clean Copy of the Rule
- 2) Strikeout Underline Copy of the Rule
- 3) Certified Governing Board Resolution
- 4) Certified Notice of Exemption to the Clerk
- 5) SIP Evaluation and Checklist
- 6) Evidence of Public Hearing
- 7) Public Comments and Responses (included in Final Staff Report)
- 8) Other Materials (Final Staff Report and Copy of Referenced Rules)

Amended 425.2, Boilers, Steam Generators, and Process Heaters (Oxides of Nitrogen) was also adopted at this meeting and being submitted in a separate package. Should you have any questions, please contact Jeremiah Cravens Senior AQS Cravensj@kerncounty.com or (661) 862-5250.

Sincerely,

A handwritten signature in blue ink, appearing to read "Glen E. Stephens".

Glen E. Stephens, P.E.
Air Pollution Control Officer

GES:JC

CALIFORNIA AIR RESOURCES BOARD

SIP COMPLETENESS CHECKLIST
(Electronic Format)

*** TO BE COMPLETED BY DISTRICT AND RETURNED TO ARB ***

All rules submitted to the EPA as State Implementation Plan (SIP) revisions must be supported by certain information and documentation for the rule packages to be deemed complete for review by the EPA. Rules will not be evaluated for approvability by the EPA unless the submittal packages are complete. To assist you in determining that all necessary materials are included in rules packages sent to the ARB for submittal to the EPA, please fill out the following form and include it with the rule package you send ARB. See the ARB's Guidelines on the Implementation of the 40 CFR 51, Appendix V, for a more detailed explanation than is provided here. Adopted rules and rule amendments should be checked against U.S. EPA's Guidance Document for Correcting Common VOC & Other Rule Deficiencies (Little Blue Book, August 21, 2001) to ensure that they contain no elements which will result in disapproval by EPA.

District: Eastern Kern Air Pollution Control District

Rule No: 425.3

Rule Title: Portland Cement Kilns (Oxides of Nitrogen)

Date Adopted or Amended: Amended March 8, 2018

ADMINISTRATIVE MATERIALS

Note: All documents should be in electronic format. Items that have signatures, initials, or stamps may be scanned.

<u>Attached</u>	<u>Not Attached</u>	<u>N/A</u>	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>COMPLETE COPY OF THE RULE:</u> Provide an unmarked copy of the entire rule as adopted or amended by your District Board.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>UNDERLINE AND STRIKEOUT COPY OF THE RULE:</u> If an amended rule, provide a complete copy of the rule indicating in underline and strikeout format all language which has been added, deleted, or changed since the rule was last adopted or amended.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>COMPLETE COPY OF THE REFERENCED RULE(S):</u> For any rule which includes language specifically referencing another rule, a copy of that other rule must also be submitted, unless it has already been submitted to EPA as part of a previous SIP submittal.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>PUBLIC NOTICE EVIDENCE:</u> Include a copy of the local newspaper clipping certification(s), stating the date of publication, which must be at least 30 days before the hearing. As an alternative, include a copy of the actual published notice of the public hearing as it appeared in the local newspaper(s). In this case, however, enough of the newspaper page must be included to show the date of publication. The notice must specifically identify by title and number each rule adopted or amended.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>RESOLUTION/MINUTE ORDER:</u> Provide the Board Clerk certified resolution or minute order. This document must include certification that the hearing was held in accordance with the information in the public notice. It must also list the rules that were adopted or amended, the date of the public hearing, and a statement of compliance with California Health and Safety Code Sections 40725-40728 (Administrative Procedures Act).
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>PUBLIC COMMENTS AND RESPONSES:</u> Submit copies of written public comments made during the notice period and at the public hearing. Also submit any written responses prepared by the District staff or presented to the District Board at the public hearing. A summary of the public comments and responses is adequate. If there were no comments made during the notice period or at the hearing, please indicate N/A to the left.

CALIFORNIA AIR RESOURCES BOARD

SIP COMPLETENESS CHECKLIST
(Electronic Format)

TECHNICAL MATERIALS

<u>Attached</u>	<u>Not Attached</u>	<u>N/A</u>	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>RULE EVALUATION FORM:</u> See instructions for completing the Rule Evaluation Form and the accompanying sample form.
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<u>NON-EPA TEST METHODS:</u> Attach all test methods that are referenced in your rule that do not appear in 40 CFR 51, 60, 61, 63, or have not been previously submitted to EPA. EPA methods used in other media such as SW846 for solid waste are not automatically approved for air pollution applications. Submittal of test methods that are not EPA-approved should include the information and follow the procedure described in Region 9's "Test Method Review & Evaluation Process."
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<u>MODELING SUPPORT:</u> Provide if appropriate. In general, modeling support is not required for VOC and NOx rules to determine their impacts on ozone levels. Modeling is required where a rule is a relaxation that affects large sources (\geq 100 TPY) in an attainment area for SO ₂ , directly emitted PM ₁₀ , CO, or NO _x (for NO ₂ purposes). In cases where EPA is concerned with the impact on air quality of rule revisions which relax limits or cause a shift in emission patterns in a nonattainment area, a reference back to the approved SIP will be sufficient provided the approved SIP accounts for the relaxation and provided the approved SIP used the current EPA modeling guidelines. If current EPA modeling guidelines were not used, then new modeling may be required.
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<u>ECONOMIC AND TECHNICAL JUSTIFICATION FOR DEVIATIONS FROM EPA POLICIES:</u> The District staff report or other information included with the submittal should discuss all potential relaxations or deviations from RACT, RACM, BACT, BACM, enforceability, attainment, RFP, or other relevant EPA requirements. This includes, for example, demonstrating that exemptions or emission limits less stringent than the presumptive RACT (e.g., a CTG) meet EPA's 5 percent policy, and demonstrating that all source categories exempted from a RACM/BACM rule are de minimus according to EPA's RACM/BACM policy.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>ADDITIONAL MATERIALS:</u> Provide District staff reports and any other supporting information concerning development of the rule or rule changes. This information should explain the basis for all limits and thresholds contained in the rule.

APCD/AQMD RULE EVALUATION FORM -- Page 1
(Electronic Format)

I. GENERAL INFORMATIONDistrict: Eastern Kern Air Pollution Control DistrictRule No(s): 425.3 Date adopted/Amended/Rescinded: Amended March 8, 2018Rule Title(s): Portland Cement Kilns (Oxides of Nitrogen)Date Submitted to ARB: May 2, 2018If an Amended Rule, Date Last Amended (or Adopted): Adopted October 13, 1994Is the Rule Intended to be Sent to the U.S. EPA as a SIP Revision? ☒ Yes ☐ No (If No, do not complete remainder of form)District Contact: Jeremiah Cravens Phone Number: (661) 862-5250 E-mail Address: Cravensi@kerncounty.comNarrative Summary of New Rule or Rule Changes: ☐ New Rule ☒ Amended Rule

Rule 425.3 was originally adopted to set emissions standards for nitrogen oxides (NOx) produced by cement kilns to levels consistent with Reasonably Available Control Technology (RACT), in order to satisfy the 1990 Federal Clean Air Act. The primary reason for amending Rule 425.3 is to lower the current NOx limits in order to meet current RACT requirements..

Pollutant(s) Regulated by the Rule (Check): ☐ ROG ☒ (NOx) ☐ SO2 ☐ Other:_____
☐ (CO) ☐ PM ☐ TAC (name):_____**II. EFFECT ON EMISSIONS**

Complete this section ONLY for rules that, when implemented, will result in quantifiable changes in emissions. Attach reference(s) for emission factor(s) and other information. Attach calculation sheet showing how the emission information provided below was determined.

Net Effect on Emissions: ☐ Increase ☐ Decrease ☒ N/A

Emission Reduction Commitment in SIP for this Source Category: _____

Inventory Year Used to Calculate Changes in Emissions: _____ Area Affected: _____

Future Year Control Profile Estimate (Provide information on as many years as possible):

APCD/AQMD RULE EVALUATION FORM -- Page 2
(Electronic Format)

Baseline Inventory in the SIP for the Control Measure: _____

Emissions Reduction Commitment in the SIP for the Control Measure: _____

Revised Baseline Inventory (if any): _____

Revised Emission Reduction Estimate (if developed): _____

Note that the district's input to the Rule Evaluation Form will not be used as input to the ARB's emission forecasting and planning.

III. SOURCES/ATTAINMENT STATUSDistrict is: ☐ Attainment ☐ Nonattainment ☒ SplitApproximate Total Number of Small (<100 TPY) Sources Affected by this Amendment: 0Percent in Nonattainment Area: 100%Number of Large (\geq 100 TPY) Sources Controlled: 3 Percent in Nonattainment Area: 100%Name(s) and Location(s) (city and county) of Large (\geq 100 TPY) Sources Controlled by Rule *(Attach additional sheets as necessary)*: Eastern Kern County - Cal Portland Cement Co, Lehigh Cement, Co, National Cement Company of California**IV. EMISSION REDUCTION TECHNOLOGY**Does the Rule Include Emission Limits that are Continuous? ☒ Yes ☐ NoIf Yes, Those Limits are in Section(s) V (Requirements) of the Rule.Other Methods in the Rule for Achieving Emission Reductions are: N/A**V. OTHER REQUIREMENTS**

The Rule Contains:

Emission Limits in Section(s): V Work Practice Standards in Section(s): V and VIRecordkeeping Requirements in Section(s): VI Reporting Requirements in Section(s): VI

APCD/AQMD RULE EVALUATION FORM -- Page 3
(Electronic Format)

VI. IMPACT ON AIR QUALITY PLAN

☐ No Impact ☐ Impacts RFP ☒ Impacts attainment

Discussion: The amended rule is expected to result in NOx emission reductions and help the District achieve further progress toward attainment of ozone standards.

**BEFORE THE AIR POLLUTION CONTROL BOARD
EASTERN KERN AIR POLLUTION CONTROL DISTRICT**

In the matter of:

ADOPTION OF AMENDED
RULE 425.3, PORTLAND CEMENT
KILNS (OXIDES OF NITROGEN) OF
THE EASTERN KERN AIR
POLLUTION CONTROL DISTRICT

Resolution No. 2018-002-03

I, Louise Roman, SECRETARY TO THE AIR POLLUTION CONTROL BOARD
OF THE EASTERN KERN AIR POLLUTION CONTROL DISTRICT, certify that the
following Resolution, proposed by Director Thomas and seconded by
Director Gleason, was duly passed and adopted by said Board at an
official meeting on this 8th day of March, 2018, by the following vote:

AYES: Thomas, Gleason, Grimes, Parris, Scrivner

NOES: None

ABSENT: None

(District Seal)



Louise Roman
Secretary of the Air Pollution Control
Board of the Eastern Kern Air Pollution
Control District

By

R E S O L U T I O N

Section 1. RECITALS:

(a) The Eastern Kern Air Pollution Control District (District) is authorized by Health and Safety Code section 40702 to make and enforce all necessary and proper orders, rules and regulations to accomplish the purposes of Division 26 of the Health and Safety Code; and

(b) The Air Pollution Control Officer ("APCO") for said District has recommended that the Board of Directors of the Eastern Kern Air Pollution Control District ("Board") consider adopting certain revisions to the Rules and Regulations of the District; and

(c) A notice of a public hearing on March 8, 2018, at the hour of 2:00 p.m. at the Tehachapi Police Department Communications Room 220 West "C" Street, Tehachapi, CA, to consider adoption of amended Rule 425.3, Portland Cement Kilns (Oxides of Nitrogen), was duly given;

(d) The matter was heard at the time and place so specified, evidence was received and all persons desiring to be heard in said matter were given an opportunity to be heard;

Section 2. IT IS RESOLVED by the Board as follows:

1. This Board does hereby revise the Rules and Regulations of the District as set forth in Exhibit "A" attached hereto and incorporated herein by this reference. The foregoing referenced Rules and Regulations attached hereto as Exhibit "A" are hereby adopted as revisions to the Rules and Regulations of the District with said amendments to be effective March 8, 2018.

2. The findings of this Board, based on the evidence submitted at the hearing upon which its decision is based, are as follows:

a. The proposed revisions to the Rules and Regulations will adopt amended Rule 425.3 to lower the nitrogen oxide (NOx) emissions limits associated with cement production; and

b. All notices required to be given by law have been duly given in accordance with Health and Safety Code section 40725, and the Board has allowed public comment, both oral and written, in accordance with Health and Safety Code section 40726; and

c. The written analysis required by Health and Safety Code section 40727.2, which identifies all existing federal air pollution control requirements that apply to the same equipment or source type as the rule proposed for adoption or modification, and also identifies any of the District's existing or proposed rules that apply to the same equipment or source type, was prepared by the District. A copy of the analysis was made available to the public from the District.

3. Further findings of this Board as required by Health and Safety Code Section 40727 are as follows:

a. The proposed revisions are necessary to accomplish the purposes of Division 26 of the Health and Safety Code and to comply with state and/or federal Clean Air Act requirements; and

b. The Board is authorized to adopt and revise rules and regulations as may be necessary or proper to execute the powers and duties granted to, and imposed upon, the District by Health and Safety Code section 40702; and

c. The Board has reviewed the proposed revisions and has determined that the said provisions are set forth in clear and concise language so that their meaning can be easily understood by the persons directly affected by them; and

d. The proposed revisions are in harmony with, and not in conflict with or contradictory to, existing District Rules and Regulations, statutes, court decisions, or state or federal regulations; and

e. The revised Rules and Regulations are being implemented in compliance with Health and Safety Code section 40001 which requires the District to adopt and enforce rules and regulations to achieve and maintain the state and federal ambient air quality standards in all areas affected by emissions sources under its jurisdiction, and enforce all applicable provisions of state and federal law.

4. This Board finds, based on the staff report filed with this Board and the record of its rule adoption hearing, and pursuant to sections 40703 and 40922 of the Health and Safety Code, that the Rules and Regulations contained in Exhibit "A" are the most cost effective of the available control measures considered by this Board.

5. This Board finds that Amended Rule 425.3, Portland Cement Kilns (Oxides of Nitrogen), poses no significant impact on the environment and is exempt from California Environmental Quality Act (CEQA) Guidelines pursuant to the Section 15061, Subsections (2) & (3).

6. District staff is directed to prepare a Notice of Exemption for this project, and the Secretary of this Board is hereby directed to file the Notice of Exemption with the Kern County Clerk.

7. The District shall maintain a record of this rule-making proceeding in accordance with Health and Safety Code section 40728.

8. The Secretary of this Board is hereby directed, for the purposes of conforming to Section 40704 of the Health and Safety Code, to cause a certified copy of this Resolution, together with the Rules and Regulations adopted herein, to be filed with the California Air Resources Board.

9. The Secretary of this Board is further directed to cause a certified copy of this Resolution to be forwarded to the APCO for said District and to the County Counsel of Kern County.

10. The APCO for said District is directed to transmit said rule to the California Air Resources Board for submittal to EPA for incorporation in the District's State Implementation Plan (SIP).

11. The Board authorizes the APCO for said District to include in the submittal or subsequent documentation any technical corrections, clarifications, or additions that may be needed to secure EPA approval, provided such changes do not alter the substantive requirements of the approved rule.

Remainder of Page Intentionally Left Blank

RULE 425.3 Portland Cement Kilns (Oxides of Nitrogen) - Adopted 10/13/94, Amended 3/8/18

I. Purpose

The purpose of this Rule is to limit nitrogen oxide (NO_x) emissions from Portland cement kilns.

II. Applicability

Provisions of this Rule shall apply to all Portland cement manufacturing facilities operating in the Eastern Kern Air Pollution Control District (District).

III. Definitions

- A. 30-Operating Day Rolling Average: Total of all hourly emissions data (in pounds) fuel was combusted in a cement kiln, in the preceding 30 operating days, divided by the total number of tons of clinker produced in that kiln during the same 30-day period.
- B. Clinker: The product of feedstock sintered in a kiln which is then ground and mixed with additives to make cement.
- C. Continuous Emissions Monitoring System (CEMS): An instrument satisfying the requirements of 40 CFR, Part 60.
- D. Low-NO_x Burner: Type of cement kiln burner that results in decreasing NO_x emissions and has an indirect-firing system and a series of channels or orifices that:
 - 1. Allow for the adjustment of the volume, velocity, pressure, and direction of the air carrying the fuel (known as primary air) and the combustion air (known as secondary air) into the kiln; and
 - 2. Impart high momentum and turbulence to the fuel stream to facilitate mixing of the fuel and secondary air.
- E. Kiln: Any device including associated preheater and precalciner devices that produce clinker by heating limestone and other raw materials for subsequent production of Portland cement.
- F. Nitrogen Oxides (NO_x) Emissions: The sum of nitric oxide (NO) and nitrogen dioxide (NO₂) in the flue gas, collectively expressed as nitrogen dioxide.
- G. Operating Day: A calendar day during which Portland cement is manufactured by the kiln. An operating day includes all valid data obtained in any daily 24-hour period during which the kiln operates and excludes any measurements made during the daily 24-hour period when the kiln was not operating or was in startup or shutdown.

- H. Portland Cement: A hydraulic cement produced by pulverizing clinker consisting essentially of hydraulic calcium silicates, usually containing one or more of the forms of calcium sulfate as an interground addition.
- I. Portland Cement Manufacturing Facility: Any facility that produces Portland cement or associated products, as defined in the Standard Industrial Classification Manual as Industry Number 3241, Portland Cement Manufacturing.
- J. Shutdown: The period of time between when kiln raw material feed and fuel to the kiln begin to be decreased to reduce the kiln operating temperature until both feed and fuel are no longer fed into the kiln and it has ceased operation. A shutdown period shall not last more than 36 hours.
- K. Startup: Period of time after non-production of clinker during which a cement kiln is heated to operating temperature from a lower temperature and feed rate is increased to normal production levels. A startup period shall not last longer than 48 hours.

IV. Exemptions

The requirements of Section V of this Rule shall not apply to:

- A. Startup and shutdown as defined in this rule; and
- B. Breakdown conditions qualifying under District Rule 111.

V. Requirements

- A. Emissions Limits: Effective March 8, 2018, No person shall operate a Portland cement manufacturing facility unless 30-operating day rolling average of NOx emissions from the kiln do not exceed:
 - 1. 2.8 lb/ton of clinker produced; or
 - 2. 3.4 lb/ton of clinker produced if low-NOx burner or low-NOx precalciner was installed and made operational by January 1, 2007.
- B. Emissions Monitoring: Any person who operates a Portland cement manufacturing facility shall provide, properly install, maintain, calibrate, and operate a continuous emission monitoring system (CEMS), as defined in Section III.C., for each emission point from the kiln.
- C. Production Monitoring: Any person who operates a Portland cement manufacturing facility shall determine hourly clinker production by one of the following two methods:
 - 1. Install, calibrate, maintain, and operate a permanent weigh scale system to measure and record weight rates in tons-mass per hour of the amount of clinker produced. The system of measuring hourly clinker production must be maintained within ± 5 percent accuracy; or

2. Install, calibrate, maintain, and operate a permanent weigh scale system to measure and record weight rates in tons-mass per hour of the amount of feed to the kiln. The system of measuring feed must be maintained within ± 5 percent accuracy. Calculate the hourly clinker production rate using a kiln specific feed to clinker ratio based on reconciled clinker production determined for accounting purposes and recorded feed rates. This ratio must be updated monthly. Note that if this ratio changes at clinker reconciliation, the new ratio must be used going forward, but a retroactive change in clinker production rates previously estimated is not required.

VI. Administrative Requirements

- A. Annual Demonstration of Compliance: Any person who operates a Portland cement manufacturing facility shall demonstrate compliance with this Rule by conducting annual testing, not more than 13 months after the most recently conducted testing, pursuant to the following test methods:
 1. NO_x stack testing for purposes of this Rule shall be conducted using EPA Test Method 7E.
 2. Stack gas flow rate testing for purposes of this Rule shall be conducted using EPA Test Method 2.
 3. Any owner or operator of a kiln subject to this Rule shall convert observed NO_x concentrations to a mass emission rate using the following formula (for purposes of this calculation, standard conditions are @ 68° F and 29.92 inches Hg):
$$\text{lb/hr} = 7.1497 \times 10^{-6} (\text{ppmv})(\text{dscfm})$$

Parts Per Million by Volume: (ppmv)

Dry Standard Cubic Feet per Minute: (dscfm)
 4. For the purposes of this Rule, NO_x shall be calculated as NO₂ on a dry basis.
- B. Recordkeeping: Any person subject to the requirements of this rule shall maintain records of the following:
 1. Results of any testing conducted to determine compliance with this Rule as specified in Section VI.A;
 2. Daily clinker production rates and kiln feed rates. During each quarter of operation, you must determine, record, and maintain the ongoing accuracy of the system of measuring hourly clinker production (or feed mass flow);
 3. Calculated NO_x emission rates from the kiln in lbs/ton of clinker produced for each day of operation of the kiln;

4. Date, time, and duration of any startup, shutdown or malfunction in the operation of any unit, emissions control equipment or emission monitoring equipment; and
5. Results of performance testing, evaluations, calibrations, checks, adjustments, and maintenance of CEMS required by this rule.

Such records shall be retained for a minimum of 60 months from date of entry and be made available to District staff upon request.

C. Reporting: Any person subject to this Rule shall meet the following reporting requirements:

1. Report to the APCO: date, time, duration, magnitude, nature and cause (if known), and corrective action taken of any exceedance;
2. Supply APCO copy of all test protocols at least 30-days prior to testing and copy of test results within 60 days following testing.

Remainder of Page Intentionally Left Blank

PROOF OF PUBLICATION

The TEHACHAPI NEWS
411 N. MILL STREET
TEHACHAPI, CA 933561

Eastern Kern Air Pollution Control District
2700 M STREET #302
BAKERSFIELD, CA 93301

Ad Number: 14441320

Edition: Tehachapi News

Class Code Public Notices

Start Date 02/07/2018

Billing Lines 69

Total Cost \$ 91.25

Billing

Address 2700 M STREET #302

BAKERSFIELD,CA

PO #: NOPH 3/8/18

Account VAPC01

Run Times 1

Stop Date 02/07/2018

Inches 7.69

Eastern Kern Air Pollution Control District

93301

STATE OF CALIFORNIA
COUNTY OF KERN

I AM A CITIZEN OF THE UNITED STATES AND A RESIDENT OF THE COUNTY AFORESAID; I AM OVER THE AGE OF EIGHTEEN YEARS, AND NOT A PARTY TO OR INTERESTED IN THE ABOVE ENTITLED MATTER. I AM THE ASSISTANT PRINCIPAL CLERK OF THE PRINTER OF THE TEHACHAPI NEWS, A NEWSPAPER OF GENERAL CIRCULATION, PRINTED AND PUBLISHED WEEKLY IN THE CITY OF TEHACHAPI COUNTY OF KERN,

AND WHICH NEWSPAPER HAS BEEN ADJUDGED A NEWSPAPER OF GENERAL CIRCULATION BY THE SUPERIOR COURT OF THE COUNTY OF KERN, STATE OF CALIFORNIA, THAT THE NOTICE, OF WHICH THE ANNEXED IS A PRINTED COPY, HAS BEEN PUBLISHED IN EACH REGULAR AND ENTIRE ISSUE OF SAID NEWSPAPER AND NOT IN ANY SUPPLEMENT THEREOF ON THE FOLLOWING DATES, TO WIT:

Pub Dates

07/Feb/18

RECEIVED
FEB 12 2018
EASTERN KERN AIR
POLLUTION CONTROL DIST.

ALL IN YEAR 2018

I CERTIFY (OR DECLARE) UNDER PENALTY OF PERJURY THAT THE FOREGOING IS TRUE AND CORRECT.

Lina Oller

DATED AT TEHACHAPI CALIFORNIA

2/7/18

First Text
NOTICE OF P

**NOTICE OF PUBLIC
HEARING ON PROPOSED
AMENDMENTS TO RULE
425.2 AND RULE 425.3**

N PROPOSED AME

NOTICE IS HEREBY GIVEN that a public hearing will be held at 2:00 pm on March 8, 2018 in the Tehachapi Police Department Community Room, 220 West "C" Street, Tehachapi, California 933561. At the hearing Eastern Kern Air Pollution Control District (EKAPCD) Governing Board will consider adopting the following: Proposed Revision Rule 425.2- Boilers, Steam Generators, and Process Heaters (Oxides of Nitrogen), Proposed Revision Rules 425.3- Portland Cement Kilns (Oxides of Nitrogen). A public workshop was held on November 2, 2017. California Air Resources Board (ARB) and US Environmental Protection Agency (EPA) also reviewed the proposals. All comments have been considered and addressed in the final draft of each proposed rule's respective staff report. NOTICE IS FURTHER GIVEN that if adopted, the rules will be submitted through ARB to EPA for incorporation as part of the California State Implementation Plan (SIP). This action would constitute a SIP revision. Interested persons may appear at the hearing and make oral comments. Written comments are invited for consideration and will be accepted until the close of business on March 5, 2018. Correspondence should be addressed to Wunna Aung for Rule 425.2 and Jeremiah Cravens for Rule 425.3 at EKAPCD, 2700 "M" Street #302, Bakersfield, CA 93301. Copies of the proposed amended rules and respective staff reports are available for review at the EKAPCD office located at 2700 "M" Street #302, Bakersfield, CA 93301. You may also download a copy from the District's website at www.kernair.org or call (661) 862-5250 and request a copy. Published 2/7/2018 Ad#14441320

PROOF OF PUBLICATION

The BAKERSFIELD CALIFORNIAN
P.O. BOX 440
BAKERSFIELD, CA 93302

EASTERN KERN AIR POLLUTION
CONTROL DISTRICT
2700 M ST 302
BAKERSFIELD, CA 93301

Ad Number: 14441518 PO #: 1
Edition: 1TBC Run Times
Class Code Legal Notices
Start Date 2/2/2018 Stop Date 2/2/2018
Billing Lines 46 Inches 276.92
Total Cost \$ 81.50 Account 1KCA15
Billing EASTERN KERN AIR POLLUTION C
Address 2700 M ST 302
BAKERSFIELD, CA 93301

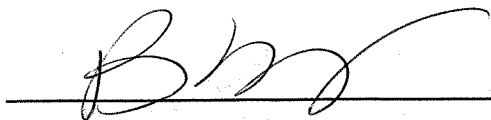
STATE OF CALIFORNIA
COUNTY OF KERN

I AM A CITIZEN OF THE UNITED STATES AND A RESIDENT OF THE COUNTY AFORESAID: I AM OVER THE AGE OF EIGHTEEN YEARS, AND NOT A PARTY TO OR INTERESTED IN THE ABOVE ENTITLED MATTER. I AM THE ASSISTANT PRINCIPAL CLERK OF THE PRINTER OF THE BAKERSFIELD CALIFORNIAN, A NEWSPAPER OF GENERAL CIRCULATION. PRINTED AND PUBLISHED DAILY IN THE CITY OF BAKERSFIELD COUNTY OF KERN,

AND WHICH NEWSPAPER HAS BEEN ADJUDGED A NEWSPAPER OF GENERAL CIRCULATION BY THE SUPERIOR COURT OF THE COUNTY OF KERN, STATE OF CALIFORNIA, UNDER DATE OF FEBRUARY 5, 1952, CASE NUMBER 57610; THAT THE NOTICE, OF WHICH THE ANNEXED IS A PRINTED COPY, HAS BEEN PUBLISHED IN EACH REGULAR AND ENTIRE ISSUE OF SAID NEWSPAPER AND NOT IN ANY SUPPLEMENT THEREOF ON THE FOLLOWING DATES, TO WIT: 2/2/18

ALL IN YEAR 2018

I CERTIFY (OR DECLARE) UNDER PENALTY OF PERJURY THAT THE FOREGOING IS TRUE AND CORRECT.



DATED AT BAKERSFIELD CALIFORNIA

2/2/18

Solicitor I.D.: 0

First Text

NOTICE OF PUBLIC HEARING ON PROPOSED AME

Ad Number 14441518

**NOTICE OF PUBLIC HEARING
ON PROPOSED AMENDMENTS
TO RULE 425.2 AND RULE 425.3**

NOTICE IS HEREBY GIVEN that a public hearing will be held at 2:00 pm on March 8, 2018 in the Tehachapi Police Department Community Room, 220 West "C" Street, Tehachapi, California 93561. At the hearing Eastern Kern Air Pollution Control District (EKAPCD) Governing Board will consider adopting the following: Proposed Revision Rule 425.2: Boilers, Steam Generators, and Process Heaters (Oxides of Nitrogen), Proposed Revision Rules 425.3: Portland Cement Kilns (Oxides of Nitrogen). A public workshop was held on November 2, 2017. California Air Resources Board (ARB) and US Environmental Protection Agency (EPA) also reviewed the proposals. All comments have been considered and addressed in the final draft of each proposed rule's respective staff report. NOTICE IS FURTHER GIVEN that if adopted, the rules will be submitted through ARB to EPA for incorporation as part of the California State Implementation Plan (SIP). This action would constitute a SIP revision. Interested persons may appear at the hearing and make oral comments. Written comments are invited for consideration and will be accepted until the close of business on March 5, 2018. Correspondence should be addressed to Wunna Aung for Rule 425.2 and Jeremiah Cravens for Rule 425.3 at EKAPCD, 2700 "M" Street #302, Bakersfield, CA 93301. Copies of the proposed amended rules and respective staff reports are available for review at the EKAPCD office located at 2700 "M" Street #302, Bakersfield, CA 93301. You may also download a copy from the District's website at www.kernair.org or call (661) 862-5250 and request a copy.

FEBRUARY, 2, 2018
14441518

RECEIVED
FEB 05 2018

EASTERN KERN AIR
POLLUTION CONTROL DIST.

AFFIDAVIT OF PUBLICATION

State of California

County of Kern

I am a citizen of the United States and a resident of the County aforesaid; I am over the age of eighteen years, and not a party to or interested in the above-entitled matter. I am the principal clerk of the Mojave Desert News, a newspaper that has been adjudicated to be a newspaper of general circulation by the Superior Court of the County of Kern, State of California on October 13th 1939 Case number 34058 in and for the County of Kern State of California that the notice which the annexed is a true printed copy, has been published in each regular and entire issue of said newspaper and not in any supplement thereof on the following dates, to wit
I certify under the penalty of perjury under the laws of the State of California that the foregoing is true and correct

02/02/2018

Signed: Misty Hickok

Office Manager

02/02/2018

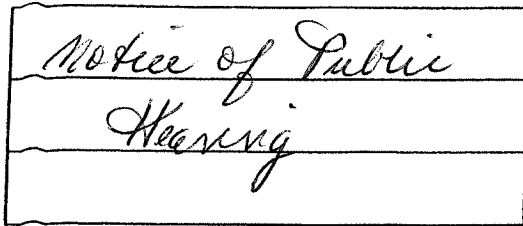


NOTICE OF PUBLIC HEARING ON PROPOSED AMENDMENTS TO RULE 425.2 AND RULE 425.3

NOTICE IS HEREBY GIVEN that a public hearing will be held at 2:00 pm on March 8, 2018 in the Tehachapi Police Department Community Room, 220 West "C" Street, Tehachapi, California 93561. At the hearing, Eastern Kern Air Pollution Control District (EKAPCD) Governing Board will consider adopting the following: Proposed Revision Rule 425.2- Boilers, Steam Generators, and Process Heaters (Oxides of Nitrogen), Proposed Revision Rules 425.3- Portland Cement Kilns (Oxides of Nitrogen). A public workshop was held on November 2, 2017. California Air Resources Board (ARB) and US Environmental Protection Agency (EPA) also reviewed the proposals. All comments have been considered and addressed in the final draft of each proposed rule's respective staff report. NOTICE IS FURTHER GIVEN that if adopted, the rules will be submitted through ARB to EPA for incorporation as part of the California State Implementation Plan (SIP). This action would constitute a SIP revision. Interested persons may appear at the hearing and make oral comments. Written comments are invited for consideration and will be accepted until the close of business on March 5, 2018. Correspondence should be addressed to Wunna Aung for Rule 425.2 and Jeremiah Cravens for Rule 425.3 at EKAPCD, 2700 "M" Street #302, Bakersfield, CA 93301. Copies of the proposed amended rules and respective staff reports are available for review at the EKAPCD office located at 2700 "M" Street #302, Bakersfield, CA 93301. You may also download a copy from the District's website at www.kernair.org or call (661) 862-5250 and request a copy.

Published in The Mojave Desert News
02/09/18, 02/16/18, 02/23/18

SUPERIOR COURT OF THE STATE OF CALIFORNIA
FOR THE COUNTY OF KERN



Case Number Amendments to
Rule 425.2-425.3
**DECLARATION
OF PUBLICATION
(2015.5 C.C.P.)**

State of California, County of Kern, ss:

Declarant says:

That at all times, herein mentioned declarant is and was a citizen of the United States, over the age of twenty-one years, and not a party to nor interested in the within matter; that declarant is the principal clerk of the printer and the publisher of THE DAILY INDEPENDENT, a newspaper of general circulation printed and published daily in the City of Ridgecrest, Indian Wells Judicial District, County of Kern, State of California, which newspaper has been adjudged a newspaper of general circulation by the said Superior Court by order made and renewed July 8, 1952, in Civil Proceeding No. 58584 of said Court: that the instrument of which the annexed in a printed copy has been published in each regular and like issue of said newspaper (and not any supplement thereof) on the following dates, to-wit:

2-7-18

I declare under penalty of perjury that the foregoing is true and correct.

EXECUTED ON February 7th, 2018, at
Ridgecrest California

Declarant Barbara M Jones

**NOTICE OF PUBLIC HEARING
ON PROPOSED
AMENDMENTS
TO RULE 425.2
AND RULE 425.3**

NOTICE IS HEREBY
GIVEN that a public

hearing will be held at 2:00 pm on March 8, 2018 in the Tehachapi Police Department Community Room, 220 West "C" Street, Tehachapi, California 93561. At the hearing Eastern Kern Air Pollution Control District (EKAPCD) Governing Board will consider adopting the following: Proposed Revision Rule 425.2-Boilers, Steam Generators, and Process Heaters (Oxides of Nitrogen), Proposed Revision Rules 425.3- Portland Cement Kilns (Oxides of Nitrogen). A public workshop was held on November 2, 2017. California Air Resources Board (ARB) and US Environmental Protection Agency (EPA) also

reviewed the proposals. All comments have been considered and addressed in the final draft of each proposed rule's respective staff report. NOTICE IS FURTHER GIVEN that if adopted, the rules will be submitted through ARB to EPA for incorporation as part of the California State Implementation Plan (SIP). This action would constitute a SIP revision. Interested persons may appear at the hearing and make oral com-

ments. Written comments are invited for consideration and will be accepted until the close of business on March 5, 2018. Correspondence should be addressed to Wunna Aung for

Rule 425.2 and Jeremiah Cravens for Rule 425.3 at EKAPCD, 2700 "M" Street #302, Bakersfield, CA 93301. Copies of the proposed amended rules and respective staff reports are available for review at the EKAPCD office located at 2700 "M" Street #302, Bakersfield, CA 93301. You may also download a copy from the District's website at www.kernair.org or call (661) 862-5250 and request a copy.

(02/07/2018)

RECEIVED
FEB 12 2018

EASTERN KERN AIR
POLLUTION CONTROL DIST.

Eastern Kern Air Pollution Control District

Rule 425.3 PORTLAND CEMENT KILNS (OXIDES OF NITROGEN)

FINAL STAFF REPORT

March 8, 2018

Prepared by

**Jeremiah Cravens
Senior Air Quality Specialist**

Reviewed by

**Glen Stephens, P.E.
Air Pollution Control Officer**

Table of Contents

I.	BOARD ADOPTION	1
II.	INTRODUCTION	1
III.	BACKGROUND	2
IV.	APPLICABILITY	2
V.	REQUIREMENTS	2
VI.	EXEMPTIONS	3
VII.	ADMINISTRATIVE REQUIREMENTS	3
VIII.	ECONOMIC REQUIREMENTS	3
IX.	ENVIRONMENTAL IMPACTS	3
X.	SOCIOECONOMIC IMPACTS	4
APPENDIX A	REVISED RULE 425.3, PORTLAND CEMENT KILNS (OXIDES OF NITROGEN) CLEAN VERSION	
APPENDIX B	REVISED RULE 425.3, PORTLAND CEMENT KILNS (OXIDES OF NITROGEN) STRIKEOUT UNDERLINE VERSION	
APPENDIX C	RULE DEVELOPMENT COMMENTS	
APPENDIX D	SNCR & SCR COST-EFFECTIVENESS ANALYSIS	

I. BOARD ADOPTION

Rule 425.3, Portland Cement Kilns (Oxides of Nitrogen) was amended by the Eastern Kern Air Pollution Control District (District) Governing Board on March 8, 2018 at its regular Board meeting held at the Tehachapi Police Department Community Room, located at 220 West "C" Street, Tehachapi, California and at the Ridgecrest City Hall, located at: 100 West California Avenue, Ridgecrest, California.

Amended Rule 425.3 became effective and enforceable upon adoption. A copy of the Rule has been submitted to the California Air Resources Board (CARB) for their review and to be forwarded to the U.S. Environmental Protection Agency (EPA) for inclusion into the State Implementation Plan (SIP).

II. INTRODUCTION

This staff report presents the amendments made to Rule 425.3, Portland Cement Kilns (Oxides of Nitrogen). Rule 425.3 was originally adopted October 13, 1994, and designed to set emissions standards for nitrogen oxides (NOx) produced by cement kilns to levels consistent with Reasonably Available Control Technology (RACT), in order to satisfy the 1990 Federal Clean Air Act. The primary reason for amending Rule 425.3 is to lower the current NOx limits in order to meet current RACT requirements.

In July, August, and October of 2017, the District conducted a series of rule development meetings with representatives from the three cement plants operating within the District's jurisdiction. National Cement Company and Lehigh Southwest Cement Company provided written comments following the meetings, while Cal Portland Cement did not.

On November 2, 2017 the District held a public rule development workshop at the Mojave Veteran's Building in Mojave, CA to present the proposed amendments to Rule 425.3. A 30-day public review and comment period followed the workshop ending December 4, 2017. The District received no comments by the close of the 30-day review period.

Appendix A is the clean version of proposed Rule 425.3, Portland Cement Kilns (Oxides of Nitrogen).

Appendix B shows all changes made to proposed Rule 425.3, Portland Cement Kilns (Oxides of Nitrogen) in ~~strikeout~~ underline.

Appendix C are the Comments made by National Cement and Lehigh Cement following a series of rule development meetings.

Appendix D is cost-effectiveness analysis of installing SNCR & SCR.

III. BACKGROUND

NO_x is an ozone precursor pollutant, that when emitted, can form tropospheric ozone in the presence of light winds, high temperatures, and sunlight. When inhaled, ozone can irritate and inflame the lining of the lungs, much like sunburn damage on skin. Potential health impacts include aggravated asthma, reduced lung capacity, and increased susceptibility to respiratory illnesses like pneumonia and bronchitis. Ozone can also hurt the economy by affecting crop yield and the durability of certain materials.

In 2008, the U.S. Environmental Protection Agency (EPA) adopted a more stringent 8-hour Ozone National Ambient Air Quality Standard (NAAQS) of 0.075 parts per million (ppm). Although the District attained the previous (1997) 8-hour Ozone NAAQS, and Indian Wells Valley met the new (2008) Ozone NAAQS, a portion of the District failed to meet the new standard by the applicable attainment date.

As a result, the District prepared and adopted an attainment plan pursuant to the 2008 Ozone NAAQS. Additionally, sections of the Federal Clean Air Act (FCAA) require ozone nonattainment areas to implement Reasonably Available Control Technology (RACT) for all sources of air pollution for which the EPA has published a Control Techniques Guidelines (CTG) document. RACT is also required for facilities located in the nonattainment area that emit 50 tons per year (tpy) of the ozone precursors NO_x or Volatile Organic Compounds (VOC).

On May 11, 2017, the District adopted a Reasonably Available Control Technology (RACT) State Implementation Plan (SIP) for the 2008 Ozone NAAQS. The RACT SIP demonstrated most current District rules fulfil RACT requirements. However, Rule 425.3 was identified as one of three rules with deficiencies that needed to be corrected in order to attain the 2008 Ozone NAAQS by 2020.

IV. APPLICABILITY

Provisions of amended Rule 425.3 are applicable to all Portland cement manufacturing facilities operating within the Eastern Kern Air Pollution Control District jurisdiction.

V. REQUIREMENTS

Effective upon adoption of amended Rule 425.3, no person shall operate a Portland cement manufacturing facility unless the 30-operating day rolling average of NO_x emissions from the kiln do not exceed:

1. 2.8 lb/ton of clinker produced; or
2. 3.4 lb/ton of clinker produced if low-NO_x burner or low-NO_x precalciner was installed and made operational by January 1, 2007.

Additionally, all Portland cement manufacturing facilities shall provide, properly install, maintain, calibrate, and operate a continuous emission monitoring system (CEMS) for each NOx emission point from the kiln. There are also requirements for monitoring clinker production, see Section V of Appendix A for complete details.

VI. EXEMPTIONS

The exemptions listed in Rule 425.3 have not been changed.

VII. ADMINISTRATIVE REQUIREMENTS

Amended Rule 425.3 contains revised language in Section VI, Administrative Requirements to aid in clarity. Recordkeeping and reporting requirements have also been added. Please see Section VI, Administrative Requirements of Appendices A and B for complete details.

VIII. ECONOMIC IMPACTS

Pursuant to California Health & Safety Code (CH&SC) §40920.6(a), the District is required to analyze the cost effectiveness of new rules or rule amendments that implement Best Available Retrofit Control Technology (BARCT) or all feasible measures. Amended Rule 425.3 employs federal RACT requirements, not BARCT or all feasible measures, and is therefore not subject to the cost effectiveness analysis mandate.

The District performed a cost-effective analysis for the costs associated with installing and operating Selective Non-Catalytic Reduction (SNCR) and Selective Catalytic Reduction (SCR) on existing Portland cement kilns. Data was used to determine if SNCR or SCR could be considered RACT. The analysis revealed installing and operating SNCR or SCR on an existing cement kiln is not economically feasible, and therefore would not be considered RACT. A copy of the cost-effective analysis is included in Appendix D of this staff report

IX. ENVIRONMENTAL IMPACTS

Both the California Environmental Quality Act (CEQA) and CARB policy require an evaluation of the potential adverse environmental impacts of proposed projects. The intent of amended Rule 425.3 is to protect public health by reducing the public's exposure to potentially harmful NOx emissions. An additional consideration is the impact that the proposed rule may have on the environment. District has determined that no significant adverse environmental impacts should occur as a result of adopting amended Rule 425.3.

Pursuant to the Section 15061, Subsections (2) & (3) of the CEQA Guidelines, staff prepared and filed a Notice of Exemption for this project upon adoption.

X. SOCIOECONOMIC IMPACTS

CHSC Section 40728.5 exempts districts with a population of less than 500,000 persons from the requirement to assess the socioeconomic impacts of proposed rules. Eastern Kern County population is below 500,000 persons.

APPENDIX A

AMENDED RULE 425.3

PORTLAND CEMENT KILNS (OXIDES OF NITROGEN)

RULE 425.3 Portland Cement Kilns (Oxides of Nitrogen) - Adopted 10/13/94, Amended 3/8/18

I. Purpose

The purpose of this Rule is to limit nitrogen oxide (NO_x) emissions from Portland cement kilns.

II. Applicability

Provisions of this Rule shall apply to all Portland cement manufacturing facilities operating in the Eastern Kern Air Pollution Control District (District).

III. Definitions

- A. 30-Operating Day Rolling Average: Total of all hourly emissions data (in pounds) fuel was combusted in a cement kiln, in the preceding 30 operating days, divided by the total number of tons of clinker produced in that kiln during the same 30-day period.
- B. Clinker: The product of feedstock sintered in a kiln which is then ground and mixed with additives to make cement.
- C. Continuous Emissions Monitoring System (CEMS): An instrument satisfying the requirements of 40 CFR, Part 60.
- D. Low-NO_x Burner: Type of cement kiln burner that results in decreasing NO_x emissions and has an indirect-firing system and a series of channels or orifices that:
 - 1. Allow for the adjustment of the volume, velocity, pressure, and direction of the air carrying the fuel (known as primary air) and the combustion air (known as secondary air) into the kiln; and
 - 2. Impart high momentum and turbulence to the fuel stream to facilitate mixing of the fuel and secondary air.
- E. Kiln: Any device including associated preheater and precalciner devices that produce clinker by heating limestone and other raw materials for subsequent production of Portland cement.
- F. Nitrogen Oxides (NO_x) Emissions: The sum of nitric oxide (NO) and nitrogen dioxide (NO₂) in the flue gas, collectively expressed as nitrogen dioxide.
- G. Operating Day: A calendar day during which Portland cement is manufactured by the kiln. An operating day includes all valid data obtained in any daily 24-hour period during which the kiln operates and excludes any measurements made during the daily 24-hour period when the kiln was not operating or was in startup or shutdown.

- H. Portland Cement: A hydraulic cement produced by pulverizing clinker consisting essentially of hydraulic calcium silicates, usually containing one or more of the forms of calcium sulfate as an interground addition.
- I. Portland Cement Manufacturing Facility: Any facility that produces Portland cement or associated products, as defined in the Standard Industrial Classification Manual as Industry Number 3241, Portland Cement Manufacturing.
- J. Shutdown: The period of time between when kiln raw material feed and fuel to the kiln begin to be decreased to reduce the kiln operating temperature until both feed and fuel are no longer fed into the kiln and it has ceased operation. A shutdown period shall not last more than 36 hours.
- K. Startup: Period of time after non-production of clinker during which a cement kiln is heated to operating temperature from a lower temperature and feed rate is increased to normal production levels. A startup period shall not last longer than 48 hours.

IV. Exemptions

The requirements of Section V of this Rule shall not apply to:

- A. Startup and shutdown as defined in this rule; and
- B. Breakdown conditions qualifying under District Rule 111.

V. Requirements

- A. Emissions Limits: Effective March 8, 2018, No person shall operate a Portland cement manufacturing facility unless 30-operating day rolling average of NOx emissions from the kiln do not exceed:
 - 1. 2.8 lb/ton of clinker produced; or
 - 2. 3.4 lb/ton of clinker produced if low-NOx burner or low-NOx precalciner was installed and made operational by January 1, 2007.
- B. Emissions Monitoring: Any person who operates a Portland cement manufacturing facility shall provide, properly install, maintain, calibrate, and operate a continuous emission monitoring system (CEMS), as defined in Section III.C., for each emission point from the kiln.
- C. Production Monitoring: Any person who operates a Portland cement manufacturing facility shall determine hourly clinker production by one of the following two methods:

1. Install, calibrate, maintain, and operate a permanent weigh scale system to measure and record weight rates in tons-mass per hour of the amount of clinker produced. The system of measuring hourly clinker production must be maintained within ± 5 percent accuracy; or
2. Install, calibrate, maintain, and operate a permanent weigh scale system to measure and record weight rates in tons-mass per hour of the amount of feed to the kiln. The system of measuring feed must be maintained within ± 5 percent accuracy. Calculate the hourly clinker production rate using a kiln specific feed to clinker ratio based on reconciled clinker production determined for accounting purposes and recorded feed rates. This ratio must be updated monthly. Note that if this ratio changes at clinker reconciliation, the new ratio must be used going forward, but a retroactive change in clinker production rates previously estimated is not required.

VI. Administrative Requirements

- A. Annual Demonstration of Compliance: Any person who operates a Portland cement manufacturing facility shall demonstrate compliance with this Rule by conducting annual testing, not more than 13 months after the most recently conducted testing, pursuant to the following test methods:
1. NO_x stack testing for purposes of this Rule shall be conducted using EPA Test Method 7E.
 2. Stack gas flow rate testing for purposes of this Rule shall be conducted using EPA Test Method 2.
 3. Any owner or operator of a kiln subject to this Rule shall convert observed NO_x concentrations to a mass emission rate using the following formula (for purposes of this calculation, standard conditions are @ 68° F and 29.92 inches Hg):

$$\text{lb/hr} = 7.1497 \times 10^{-6} (\text{ppmv})(\text{dscfm})$$

Parts Per Million by Volume: (ppmv)

Dry Standard Cubic Feet per Minute: (dscfm)
 4. For the purposes of this Rule, NO_x shall be calculated as NO₂ on a dry basis.
- B. Recordkeeping: Any person subject to the requirements of this rule shall maintain records of the following:
1. Results of any testing conducted to determine compliance with this Rule as specified in Section VI.A;
 2. Daily clinker production rates and kiln feed rates. During each quarter of operation, you must determine, record, and maintain the ongoing accuracy of the system of measuring hourly clinker production (or feed mass flow);

3. Calculated NO_x emission rates from the kiln in lbs/ton of clinker produced for each day of operation of the kiln;
4. Date, time, and duration of any startup, shutdown or malfunction in the operation of any unit, emissions control equipment or emission monitoring equipment; and
5. Results of performance testing, evaluations, calibrations, checks, adjustments, and maintenance of CEMS required by this rule.

Such records shall be retained for a minimum of 60 months from date of entry and be made available to District staff upon request.

C. Reporting: Any person subject to this Rule shall meet the following reporting requirements:

1. Report to the APCO: date, time, duration, magnitude, nature and cause (if known), and corrective action taken of any exceedance;
2. Supply APCO copy of all test protocols at least 30-days prior to testing and copy of test results within 60 days following testing.

Remainder of Page Intentionally Left Blank

APPENDIX B:

AMENDED RULE 425.3

**PORTLAND CEMENT KILNS
(OXIDES OF NITROGEN)**

STRIKEOUT UNDERLINE

RULE 425.3 Portland Cement Kilns (Oxides of Nitrogen) - Adopted 10/13/94, Amended 3/8/18

I. Purpose

The purpose of this Rule is to limit nitrogen oxides ~~of nitrogen~~ (NOx) emissions from ~~existing~~ Portland cement kilns. ~~to levels consistent with Reasonably Available Control Technology to satisfy 1990 Federal Clean Air Act Amendments, Section 182 (f).~~

II. Applicability

~~The p~~Provisions of this Rule shall apply to all Portland cement manufacturing facilities ~~kilns operated operating in the KCAPCDEastern Kern Air Pollution Control District (District). It is hereby acknowledged kilns constructed and placed in operation after January 1, 1990 meet new source Best Available Control Technology requirements of Rule 210.1, and exceed requirements of Section V, and; therefore, are not subject to Section VII.~~

III. Definitions

A. 30-Operating Day Rolling Average: Total of all hourly emissions data (in pounds) fuel was combusted in a cement kiln, in the preceding 30 operating days, divided by the total number of tons of clinker produced in that kiln during the same 30-day period.

B. Clinker: ~~the~~ The product of feedstock sintered in a cement kiln from which finished is then ground and mixed with additives to make cement is manufactured by milling.

BC. Continuous NOx emissions-Emissions monitoring-Monitoring system-System (CEMS): ~~an~~ An instrument satisfying the requirements of 40 CFR, Part 60.

D. Low-NOx Burner: Type of cement kiln burner that results in decreasing NOx emissions and has an indirect-firing system and a series of channels or orifices that:

1. Allow for the adjustment of the volume, velocity, pressure, and direction of the air carrying the fuel (known as primary air) and the combustion air (known as secondary air) into the kiln; and

2. Impart high momentum and turbulence to the fuel stream to facilitate mixing of the fuel and secondary air.

E. Kiln: Any device including associated preheater and precalciner devices that produce clinker by heating limestone and other raw materials for subsequent production of Portland cement.

F. Nitrogen Oxides (NOx) Emissions: The sum of nitric oxide (NO) and nitrogen dioxide (NO2) in the flue gas, collectively expressed as nitrogen dioxide.

G. Operating Day: A calendar day during which Portland cement is manufactured by the kiln. An operating day includes all valid data obtained in any daily 24-hour period

during which the kiln operates and excludes any measurements made during the daily 24-hour period when the kiln was not operating or was in startup or shutdown.

~~CH.~~ Portland Cement: ~~—cementitious, crystalline compound composed of metallic oxides. A hydraulic cement produced by pulverizing clinker consisting essentially of hydraulic calcium silicates, usually containing one or more of the forms of calcium sulfate as an interground addition.~~

~~D. Portland Cement Kiln—~~a system, including any solid fuel preparation equipment, used to calcine and fuse a mixture of limestone, clay, recycled dust and other raw materials to produce Portland cement.

I. Portland Cement Manufacturing Facility: Any facility that produces Portland cement or associated products, as defined in the Standard Industrial Classification Manual as Industry Number 3241, Portland Cement Manufacturing.

J. Shutdown: The period of time between when kiln raw material feed and fuel to the kiln begin to be decreased to reduce the kiln operating temperature until both feed and fuel are no longer fed into the kiln and it has ceased operation. A shutdown period shall not last more than 36 hours.

~~EK.~~ Start-up: ~~—period~~ Period of time after non-production of clinker during which a cement kiln is heated to operating temperature from a lower temperature and feed rate is increased to normal production levels. A startup period shall not last longer than 48 hours.

~~F. Shut-down—~~period of time cement kiln is allowed to cool from operating temperature to a lower temperature in preparation for a period of non-production of clinker.

IV. Exemptions

The requirements of Section V of this Rule shall not apply to:

- A. Startup and shutdown as defined in ~~Subsections III.E and F~~ this rule; and
- B. Breakdown conditions qualifying under District Rule 111.

V. Requirements

- A. Emissions Limits: Effective March 8, 2018, No person shall operate a Portland cement manufacturing facility unless 30-operating day rolling average of NOx emissions from the kiln do not exceed:
 - 1. 2.8 lb/ton of clinker produced; or
 - 2. 3.4 lb/ton of clinker produced if low-NOx burner or low-NOx precalciner was installed and made operational by January 1, 2007.

~~kiln unless such kiln is equipped with a continuous NO_x emissions monitoring system as defined in Subsection III.B. If a kiln's dust collector exhaust system will not accommodate a CEM conforming to 40 CFR, Part 60 criteria, an equivalent calculational and record keeping procedure based upon actual emission testing and correlations with operating parameters (kiln loading, fuel type, percent excess oxygen, etc.) may be substituted.~~

B. Emissions Monitoring: Any person who operates a Portland cement manufacturing facility shall provide, properly install, maintain, calibrate, and operate a continuous emission monitoring system (CEMS), as defined in Section III.C., for each emission point from the kiln.

C. Production Monitoring: Any person who operates a Portland cement manufacturing facility shall determine hourly clinker production by one of the following two methods:

1. Install, calibrate, maintain, and operate a permanent weigh scale system to measure and record weight rates in tons-mass per hour of the amount of clinker produced. The system of measuring hourly clinker production must be maintained within ± 5 percent accuracy; or

2. Install, calibrate, maintain, and operate a permanent weigh scale system to measure and record weight rates in tons-mass per hour of the amount of feed to the kiln. The system of measuring feed must be maintained within ± 5 percent accuracy. Calculate the hourly clinker production rate using a kiln specific feed to clinker ratio based on reconciled clinker production determined for accounting purposes and recorded feed rates. This ratio must be updated monthly. Note that if this ratio changes at clinker reconciliation, the new ratio must be used going forward, but a retroactive change in clinker production rates previously estimated is not required.

~~B. Each owner/operator of a Portland cement kiln shall provide NO_x Reasonably Available Control Technology (RACT) for this type of kiln. RACT can include, but is not limited to any one or a combination of the following: combustion controls, low-NO_x burner(s), staged combustion, and/or use of NO_x reducing fuels.~~

~~C. Any owner/operator of a Portland cement kiln subject to this Rule shall limit NO_x emissions to no more than:~~

~~1. 11.6 lbs/ton of clinker produced when averaged over any 24 consecutive hour period, and~~

~~2. 6.4 lbs/ton of clinker produced when averaged over any 30 consecutive day period.~~

~~D. Should State and/or Federal law be amended, or the District's ozone non-attainment status be changed to not require RACT for Portland cement kilns, implementation of this Rule shall cease.~~

VI. Administrative Requirements

A. Recordkeeping

~~Continuous NOx emissions monitoring system (or Subsection V.A. equivalent) records and clinker production records for each cement kiln shall be maintained at the facility for a period of at least two years and made readily available to District personnel.~~
Annual Demonstration of Compliance: Any person who operates a Portland cement manufacturing facility shall demonstrate compliance with this Rule by conducting annual testing, not more than 13 months after the most recently conducted testing, pursuant to the following test methods:

B. Test Methods

1. NOx stack testing for purposes of this Rule shall be conducted using EPA Test Method 7E.
- ~~2. The following formula shall be used to convert uncorrected observed NOx concentration in ppm to tons per day at standard conditions of 68°F and a gas pressure of 29.92 inches of mercury:~~
2. Stack gas flow rate testing for purposes of this Rule shall be conducted using EPA Test Method 2.
3. Any owner or operator of a kiln subject to this Rule shall convert observed NOx concentrations to a mass emission rate using the following formula (for purposes of this calculation, standard conditions are @ 68° F and 29.92 inches Hg):

$$\text{lb/hr} = 7.1497 \times 10^{-6} (\text{ppmv})(\text{dscfm})$$

Parts Per Million by Volume: (ppmv)

Dry Standard Cubic Feet per Minute: (dscfm)
4. For the purposes of this Rule, NOx shall be calculated as NO₂ on a dry basis.

B. Recordkeeping: Any person subject to the requirements of this rule shall maintain records of the following:

1. Results of any testing conducted to determine compliance with this Rule as specified in Section VI.A;
2. Daily clinker production rates and kiln feed rates. During each quarter of operation, you must determine, record, and maintain the ongoing accuracy of the system of measuring hourly clinker production (or feed mass flow);
3. Calculated NOx emission rates from the kiln in lbs/ton of clinker produced for each day of operation of the kiln;
4. Date, time, and duration of any startup, shutdown or malfunction in the operation of any unit, emissions control equipment or emission monitoring equipment; and
5. Results of performance testing, evaluations, calibrations, checks, adjustments, and maintenance of CEMS required by this rule.

Such records shall be retained for a minimum of 60 months from date of entry and be made available to District staff upon request.

C. Reporting: Any person subject to this Rule shall meet the following reporting requirements:

1. Report to the APCO: date, time, duration, magnitude, nature and cause (if known), and corrective action taken of any exceedance;
2. Supply APCO copy of all test protocols at least 30-days prior to testing and copy of test results within 60 days following testing.

VII. Compliance Schedule

~~The owner/operator of any kiln subject to this Rule shall:~~

- ~~A. Submit a compliance plan no later than May 31, 1995, including a description of how each kiln has already been made to comply with Section V, or a description of all actions to be taken to affect compliance;~~
 - ~~B. If installation of emissions control equipment or devices, or kiln modification is necessary to meet the requirements of Section V, file a complete application for Authority to Construct (ATC) no later than May 31, 1995; and~~
- ~~Demonstrate full compliance with applicable sections of Section V by May 31, 1997.~~

APPENDIX C:

AMENDED RULE 425.3

**PORTLAND CEMENT KILNS
(OXIDES OF NITROGEN)**

RULE DEVELOPMENT COMMENTS

Appendix C – Comments

On November 2, 2017 the District held a public rule development workshop at the Mojave Veteran's Building in Mojave, CA to present the proposed amendments to Rule 425.3. A 30-day public review and comment period followed the workshop ending December 4, 2017. The District did not receive any comments by the close of the 30-day review period. However, National Cement Company and Lehigh Southwest Cement Company provided written comments in response to the rule development meetings held in July, August, and October of 2017, (prior to the 11/2/2017 workshop).

National Cement Company and Lehigh Southwest Cement Company written comments are provided on the following pages.

Remainder of page Intentionally Left Blank



15821 Ventura Blvd.
Suite 475
Encino, California 91436-4778
Telephone: 818-728-5200
Fax: 818-788-0615

July 31, 2017

Mr. Glen Stephens, APCO
Eastern Kern Air Pollution Control District
2700 M Street, Suite 302
Bakersfield, CA 93301

Re: NOx RACT Update

Dear Mr. Stephens:

We appreciate your taking the time to meet with us last week to discuss the ongoing review of the EKAPCD NOx RACT rule for Portland Cement kilns. As we discussed, our current NOx limit is 3.4 pounds per ton of clinker, averaged over 30 days. It stems from a BACT review in 2000-2001. We currently have average emissions below 3 pounds per ton but we are occasionally very close to the 3.4 limit on a 30 day average, due to the inherent variations in NOx emissions due to kiln inputs, ambient conditions and operating rates. We will not be able to meet a tighter limit without some change to our NOx controls.

We have looked into reducing our emissions further with a change in burner design. We noted that the current burners have low-NOx features. Our parent company has kilns in Europe that have installed the latest in low NOx burner technology and not found any significant improvements in NOx emissions over what we have.

We know that some kilns have Selective Non-Catalytic Reduction (SNCR). We asked our consultant, John Holmes of AEMS, LLC to look into the cost of SNCR. At our meeting with you, John presented a cost analysis based on work EPA did in support of a review of the NSPS for Portland Cement kilns. John's analysis indicated that the installation of SNCR could cost over \$3,000,000 and the operating cost would be over \$500,000 per year. These represent a significant financial burden.

You indicated that EPA had asked that the District consider lowering the limit to 2.8 pounds per ton which they indicated is the RACT limit in Texas. We said that we thought that was surprisingly stringent and indicated that we would look into how Texas arrived at that number.

RECEIVED
AUG 02 2017
EASTERN KERN AIR
POLLUTION CONTROL DIST.

Appendix C – Comments

Our review of the Texas regulation, which I have attached, did show that the limit for units such as ours is 2.8 pounds per ton on a 30 day average. However, importantly the rule also says: "Each preheater or precalciner kiln for which either a low-NO_x burner or a low-NO_x precalciner is installed and operated during kiln operation is not required to meet the NO_x emission specifications of subsection (a) of this section."

The subsection (a) specification is the 2.8 limit. As you can see, it is Texas' expectation that kilns will install low-NO_x burners and need only do that if they are not then able to meet the 2.8 figure. We have low-NO_x burners and could comply with the Texas RACT rule given this important qualification of the 2.8 limit.

In summary, our current NO_x limit is 3.4 which comes from a BACT determination and it is substantially tighter than the current RACT limit of 6.4. Furthermore, we are not able to meet a limit less than 3.4 without installing SNCR which is costly both to install and to operate.

We see several options for revising the rule which will work for us. They include:

- Tightening the limit from 6.4 to 3.4.
- Tightening the limit to something less than 3.4 but keeping the provision in the current EKAPCD rule that allows sources with BACT limits set after 1990, such as ours, to meet the BACT limit instead.
- Tightening the limit to 2.8 to match Texas but also include the Texas provision that allows one to have a low NO_x burner in lieu of meeting that limit.

Again, thank you for seeking and considering our input on this matter.

Sincerely,



Olivia Fisher
Environmental Manager



Lehigh Southwest Cement Company
13573 E. Tehachapi Blvd.
Tehachapi, CA 93561
Phone (661) 822-4445
Fax (661) 822-1278

August 21, 2017

Mr. Glen Stephens
East Kern Air Pollution Control District
2700 "M" Street, Suite 302
Bakersfield, CA 93301-2370

Re: EKAPCD NOx RACT Response

Dear Mr. Stephens:

Lehigh Southwest Cement (plant) hereby submits this follow-up letter in response to our meeting with the Eastern Kern Air Pollution Control District (EKAPCD) on August 10, 2017 at 10:30 am. We appreciate you and your team taking the time to come discuss the NOx RACT rule and welcoming our input.

During the meeting, your team indicated the Environmental Protection Agency (EPA) had asked the District to lower the NOx RACT limit from 6.4 to 2.8 pounds per ton (of clinker) by referring EKAPCD to the Texas RACT rule. Currently, our NOx limits are 281.33 pounds per hour; 6,752 pounds per day; and 1,232.24 tons per year. Please note that we do not have a "pounds per ton" limit. Our review of historic data shows that a NOx limit of 3 pounds per ton or above based on a rolling 30-day average will be suitable for the plant operation. However, if EKAPCD would require a more stringent limit of 2.8 pound per ton, this would present a huge financial burden to the plant.

In addition, it is important to note that our current kiln main burner is a "low-NOx burner", with this setup there cannot be any further improvement in the NOx emission control. Therefore, having a limit below 3 pounds per ton will require us to install Selective Non-Catalytic Reduction (SNCR). According to an EPA report, "NOx Control Technologies for the Cement Industry", the installation and annualized operating cost of SNCR could cost well over \$3,000,000 and \$500,000 respectively. This represents a significant financial responsibility for the plant.

Another option would be to add a provision similar to the one in the Texas RACT rule §117.3110(d) which states: "Each preheater or precalciner kiln for which either a low-NOx burner or a low-NOx precalciner is installed and operated during kiln operation is not required to meet the NOx emission specifications of subsection (a) of this section". Hence, we would be willing to propose reducing the limit from 6.4 to 2.8 pounds per ton, as long as EKAPCD would include a provision that exempts low-NOx kiln burner kilns (like our plant) from the stringent 2.8 pounds per ton limit. As your team proposed in the

Appendix C – Comments

meeting, we will welcome the idea of setting 3.4 pounds per short ton of clinker (30-day rolling average) limit as part of the provision for low-NOx Burner kilns.

Once again, we appreciate your willingness to coordinate with us in finding a workable solution for both groups.

If you need any additional information or have any questions, please feel free to contact me via email: Gideon.sarpong@lehighhanson.com; or 661-822-4445 ext 202)

Sincerely,

A handwritten signature in blue ink, appearing to read 'Gideon Sarpong', is written over a faint, larger blue ink signature that is partially obscured.

Gideon Sarpong
Environmental Manager
(661) 822-4445 Extension 202
Gideon.Sarpong@LehighHanson.com

Enclosures

Texas NOx RACT Rule for Cement Kilns

cc: Rick Sterner, HTC.
Craig Mifflin, Lehigh Hanson
Jean Claude Royer, Lehigh Hanson

APPENDIX D

AMENDED RULE 425.3

PORTLAND CEMENT KILNS (OXIDES OF NITROGEN)

SNCR & SCR COST-EFFECTIVENESS ANALYSIS

Appendix D – Cost-Effectiveness

The District assessed the cost of installation and use of Selective Non-Catalytic Reduction (SNCR) and Selective Catalytic Reduction (SCR) on existing Portland cement kilns. These NO_x control technologies were evaluated against an example kiln meeting the current limit of 6.4 pounds of NO_x per ton of clinker produced (see D-2). SNCR was estimated to reduce a 1980s era kiln to an emissions limit of approximately 1.71 pounds per ton (from 3.41), however, the cost was extremely high. Installing SNCR or SCR on an existing cement kiln is not economically feasible; therefore, not considered RACT. RACT is defined as the lowest emissions limitation that a particular source is capable of meeting by the application of control technology that is reasonably available considering technological and economic feasibility (44 FR 53762, September 17, 1979).

Remainder of Page Intentionally Left Blank

SNCR and SCR Cost-Effectiveness Analysis	Kiln Nox Control Examples				NOT Cost-Effective	
	SNCR	SCR	SNCR	SCR	SNCR	SCR
	Holcim Example	Holcim Example	TXI Example	TXI Example	6.4 Kiln	6.4 Kiln
Project Term (years)	15	15	15	15	15	15
Control Capital Cost (2006 \$)	\$ 2,300,000	\$ 7,500,000	\$ 2,300,000	\$ 8,400,000	\$ 4,316,716	\$ 14,076,246
Control O&M (2006 \$)	\$ 1,100,000	\$ 2,400,000	\$ 1,000,000	\$ 2,200,000	\$ 2,064,516	\$ 4,504,399
Costs						
Equivalent Project Capital Cost (2017 \$)	\$ 3,183,738	\$ 10,381,754	\$ 3,183,738	\$ 11,627,565	\$ 5,975,344	\$ 19,484,817
Equivalent Project O&M (2017 \$)	\$ 1,522,657	\$ 3,322,161	\$ 1,384,234	\$ 3,045,315	\$ 2,857,773	\$ 6,235,141
Capital Recovery Factor (15@10%)	0.1315	0.1315	0.1315	0.1315	0.1315	0.1315
Discounted Cash Flow Factor (15@4%)	11.118	11.118	11.118	11.118	11.118	11.118
DCF O&M Costs (2017 \$)	\$ 16,928,903	\$ 36,935,789	\$ 15,389,912	\$ 33,857,807	\$ 31,772,722	\$ 69,322,302
NOx Emissions						
Control Efficiency	50%	85%	35%	80%	50%	85%
Uncontrolled Rate (lb/ton of clinker)	3.41	3.41	1.36	1.36	6.40	6.40
Controlled Rate (lb/ton of clinker)	1.71	0.51	0.88	0.27	3.20	0.96
Uncontrolled Emissions (tpy)	2222	2222	1710	1710	2222	2222
Controlled Emissions (tpy)	1111.0	333.3	1111.5	342.0	1333.2	1333.2
Reduction (percent)	50.0%	85.0%	35.0%	80.0%	40.0%	40.0%
Reduction (tons/yr)	1111.0	1888.7	598.5	1368.0	888.8	888.8
Cost Effectiveness						
Average (DCF Method)						
NOx Cost Effectiveness (\$/ton)	\$ 1,207	\$ 1,670	\$ 2,069	\$ 2,217	\$ 2,831	\$ 6,661
Average (CRF Method)						
NOx Cost Effectiveness (\$/ton)	\$ 1,747	\$ 2,482	\$ 3,012	\$ 3,344	\$ 4,099	\$ 9,897
Average (Combined CRF and DCF)						
NOx Cost Effectiveness (\$/ton)	\$ 1,393	\$ 2,026	\$ 2,414	\$ 2,767	\$ 3,267	\$ 8,082

Notes:

Holcim & TXI control examples taken from "Assessment of Nox Emissions Reduction Strategies for Cement Kilns - Ellis County" ERG, July 14, 2006

SNCR, SCR Upgrade costs estimated for 6.4 kiln using ratio of Nox rate (6.4 to 3.41)

Annual inflation rate of 3% used to adjust to current year (2017 dollars)

Real interest rate of 4% at 15 years used for Discounted Cash Flow Factor (SCAQMD method)

Capital cost annualized by multiplying by CRF based on 15 years at 10%

RECEIVED WITH FEE
RECEIPT # 15136713

NOTICE OF EXEMPTION
From California Environmental Quality Act

TO: County Clerk
County of Kern
1115 Truxtun Avenue
Bakersfield, CA 93301

FROM: Eastern Kern Air Pollution
Control District
2700 "M" Street, Suite 302
Bakersfield, CA 93301
KERN COUNTY

Name of Person or Agency Carrying Out Project

Eastern Kern Air Pollution Control District (EKAPCD)

MAR 13 2018

Project Title

Rule 425.3, Portland Cement Kilns (Oxides of Nitrogen)

MARY B. BEDARD

Project Location - Specific

Portion of Kern County within the Mojave Desert Air Basin

AUDITOR CONTROLLER-COUNTY CLERK
BY SV DEPUTY

Project Location - City

Project Location - County
Eastern Kern County

Description of Nature, Purpose, and Beneficiaries of Project

Objective: Amended Rule 425.3, Portland Cement Kilns (Oxides of Nitrogen) lowers current NOx limits from cement kilns to levels consistent with Reasonably Available Control Technology (RACT), in order to satisfy the 1990 Federal Clean Air Act.

Name of Public Agency Approving Project

Eastern Kern Air Pollution Control District (EKAPCD)

Permit (ATC) Numbers

N/A

Issue Date

March 8, 2018

Exempt Status: (Check One)

- ☐ Ministerial (Section 15268)
☐ Declared Emergency (Section 15269(a))
☐ Emergency Project (Section 15269 (b) or (c))
☒ Categorical Exemption (Sections 15308 & 15354): Application by public Agency (Section 15300.4)
☒ Project Expected to have Insignificant Impact (Section 15061(b) (3))

Reason(s) Why Project is Exempt

Actions taken by the regulatory agency (EKAPCD) are categorically exempt from CEQA to assure the protection of the environment. Categorical exemptions from CEQA are allowed for projects that will not have a significant adverse effect to the environment.

Contact Person

Jeremiah Cravens

Area Code

(661)

Telephone No.

862-5250

If Filed by Applicant:

1. Attach certified document of exemption finding
2. Has a Notice of Exemption been filed by the public agency approving the project? ☐ Yes ☐ No n/a

Date Received for Filing

RECEIVED
APR 23 2018

EASTERN KERN AIR
POLLUTION CONTROL DIST.

Notice of Environmental Document
Posted by County Clerk on 3/13/18
and for 30 days thereafter, Pursuant to
Section 21152(C), Public Resources Code

RULE 111 Equipment Breakdown - Adopted 4/18/72, Amended 4/25/78, 5/16/78, 5/2/96

I. Breakdown

An occurrence which constitutes a breakdown condition, and which persists only until the end of the production run or 24-hours, whichever is sooner (except for continuous monitoring equipment, for which the period shall be ninety-six (96) hours), shall constitute a violation of any applicable emission limitation or restriction prescribed by these Rules and Regulations; however, no enforcement action may be taken provided the owner or operator demonstrates to the Control Officer that a breakdown condition exists and the following requirements are met:

- A. The owner or operator submits the notification required by Subparagraph III.A.;
- B. The owner or operator immediately undertakes appropriate corrective measures and comes into compliance; and
- C. The Air Pollution Control Officer determines that the attainment or maintenance of applicable ambient air quality standards will not be endangered.

II. Breakdown Duration

An occurrence which constitutes a breakdown condition shall not persist longer than the end of production run or 24-hours, whichever is sooner (except for continuous monitoring equipment, for which the period shall be ninety-six (96) hours), unless the owner or operator has obtained an emergency variance.

If the breakdown condition will either require more than twenty-four (24) hours to correct or persist longer than the end of the production run (except for continuous monitoring equipment, for which the period shall be ninety-six (96) hours), the owner or operator may, in lieu of shutdown, request the Control Officer to commence the emergency variance procedure set forth in Rule 519.

III. Breakdown Procedures

- A. The owner or operator shall notify the Control Officer of any occurrence which constitutes a breakdown condition; such notification shall identify the time, specific location, equipment involved, and (to the extent known), the cause(s) of the occurrence and shall be given as soon as reasonably possible, but no later than one (1) hour after its detection unless the owner or operator demonstrates, to the satisfaction of the Control Officer, that a longer reporting period was necessary.
- B. The Control Officer shall establish written procedures and guidelines, including appropriate forms for logging of initial reports, investigation, and enforcement follow-up, to ensure that all reported breakdown occurrences are handled uniformly to final disposition.
- C. Upon receipt of notification pursuant to Subparagraph III.A., the Control Officer shall promptly investigate and determine whether the occurrence constitutes a breakdown condition. If the Control Officer determines the occurrence does not constitute a

breakdown condition, the Air Pollution Control Officer may take appropriate enforcement action, including, but not limited to seeking fines, an abatement order, or an injunction against further operation.

IV. Reporting Requirements

Within 10 days after a breakdown occurrence has been corrected, the owner or operator shall submit a written report to the Control Officer including:

- A. A statement the occurrence has been corrected, together with the date of correction and proof of compliance:
- B. A specific statement of the reason(s) or cause(s) for the occurrence sufficient to enable the Control Officer to determine whether the occurrence was a breakdown condition,
- C. A description of the corrective measures undertaken and/or to be undertaken to avoid such an occurrence in the future (the Control Officer may, at the request of the owner or operator, for good cause, extend up to 30 days the deadline for submitting the description required by this subparagraph);
- D. An estimate of the emissions caused by the occurrence; and
- E. Pictures of the equipment or control which failed, if available.

V. Burden of Proof

The burden shall be on the owner or operator of the source to provide sufficient information to demonstrate a breakdown did occur. If the owner or operator fails to provide sufficient information, the Control Officer shall undertake appropriate enforcement action.

VI. Failure to Comply with Reporting Requirements

Any failure to comply, or comply in a timely manner, with the reporting requirements established in Subparagraphs III.A. and IV.A. through IV.E. of this Rule shall constitute a separate violation of this Rule.

VII. False Claiming of Breakdown Occurrence

It shall constitute a separate violation of this Rule for any person to file with the Air Pollution Control Officer a report which falsely, or without probable cause, claims that an occurrence is a breakdown occurrence.

VIII. Hearing Board Standards and Guidelines

The Hearing Board shall adopt standards and guidelines consistent with this Rule to assist the chairperson or other designated member(s) of the Hearing Board in determining whether to grant or deny an emergency variance, and to assist the Control Officer in the enforcement of this Rule.

IX. Definition

For the purposes of this Rule, a breakdown condition means an unforeseeable failure or malfunction of 1) any air pollution control equipment, or related operating equipment, which causes a violation of any emission limitation or restriction prescribed by these Rules and Regulations, or by State law, or 2) any in-stack continuous monitoring equipment, where such failure or malfunction:

- A. Is not the result of neglect or disregard of any air pollution control law or Rule or Regulation;
- B. Is not intentional or the result of negligence;
- C. Is not the result of improper maintenance;
- D. Does not constitute a nuisance; and
- E. Is not a recurrent breakdown of the same equipment.